This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) A compound of formula I

$$R^3$$
 S
 N
 $R^{2''}$
 $R^{2'''}$
 $R^{2'''}$

in which

R¹ is H or A,

R²¹, R²¹¹, R²¹¹¹ are each, independently of one another, H, A, OH, OCH₃, OCF₃, Hal, CN, COOR¹, CONR¹ or NO₂,

R³ is A, Ar or A-Ar,

R⁴ is H or A,

A is unbranched or branched alkyl having 1-10 carbon atoms, in which one or two CH₂ groups may be replaced by O or S atoms and/or by -CH=CH- groups and/or 1-7 H atoms may be replaced by F,

Ar is phenyl, naphthyl or biphenyl, each of which is unsubstituted or mono-, dior trisubstituted by Hal, A, OR⁴, N(R⁴)₂, NO₂, CN, COOR⁴, CON(R⁴)₂, NR⁴COA, NR⁴CON(R⁴)₂, NR⁴SO₂A, COR⁴, SO₂N(R⁴)₂ or SO₂A,

A-Ar is arylalkyl, where A and Ar have one of the above-mentioned meanings,

Hal is F, Cl, Br or I, and

n is 0, 1, 2, 3, 4, 5, 6, 7, 8, 9 or 10,

or a pharmaceutically acceptable salt thereof.

- 2. (Previously Presented) A compound according to Claim 1, in which R¹ is hydrogen.
- 3. (Previously Presented) A compound according to Claim 1, in which R²¹, R²¹¹, R²¹¹ are hydrogen.

- 4. (Currently Amended) A compound according to claim 1, in which R³ is n-propyl, i-propyl, n-butyl, 2,2,2-trifluoroethyl, phenyl, benzyl or 2-nitrophenylmethyl.
- 5. (Currently Amended) A compound according to claim 1, in which n is 1.
- 6. (Currently Amended) A compound according to Claim 1, which is N-[4-(1-benzylpiperidin-4-yloxy)phenyl]-C-phenylmethanesulfonamide, N-[4-(1-benzylpiperidin-4-yloxy)phenyl]-C-[2-nitrophenyl]methanesulfonamide,

N-[4-(1-benzylpiperidin-4-yloxy)phenyl]benzenesulfonamide,

N-[4-(1-benzylpiperidin-4-yloxy)phenyl]- 2-propanesulfonamide,

N-[4-(1-benzylpiperidin-4-yloxy)phenyl]-1-butanesulfonamide,

N-[4-(1-benzylpiperidin-4-yloxy)phenyl]-1-propanesulfonamide, or

N-[4-(1-benzylpiperidin-4-yloxy)phenyl]-1-2,2,2-trifluoroethanesulfonamide, or a pharmaceutically acceptable salt thereof.

7. (Currently Amended) A process for preparing a compound of formula I according to claim1 or a pharmaceutically acceptable salt thereof, comprising a) reacting a compound of formula V

in which R is a nucleophilic leaving group suitable for nucleophilic substitution on an aromatic compound with a compound of formula VI

in which $R^{2'}$, $R^{2'''}$ and n are as defined for the compound of formula I, giving a compound of formula IV

$$O_2N$$
 O_2N
 $R^{2''}$
 $R^{2'''}$
 $R^{2'''}$

b) converting the compound of formula IV by hydrogenation and optionally alkylation into a compound of formula II

in which R^{I} is as defined for the compound of formula I, which is then

c) reacted with a compound of the formula III

Error! Bookmark not defined. III,

in which R3 is as defined for the compound of formula I, and L is a nucleophilic leaving group, giving a compound of formula I, and optionally a protecting group is subsequently cleaved off, and/or a base or acid of a compound of formula I is converted into one of its salts.

- 8. (Cancelled)
- 9. (Cancelled)
- 10. (Cancelled)
- 11. (Withdrawn and Currently Amended) A pharmaceutical composition comprising a compound of formula I according to claim 1, or a pharmaceutically acceptable salt thereof, [[-]] and a pharmaceutically acceptable excipient and/or adjuvant.

- 12. (Previously Presented) A pharmaceutical composition according to claim 11, further comprising at least one further pharmaceutically active ingredient.
- 13. (Withdrawn) A method for the prophylaxis or treatment of a disease in which the binding of a compound of formula I according to claim 1 or a pharmaceutically acceptable salt thereof to a nicotinic and/or muscarinic acetylcholine receptor leads to an improvement in the clinical picture comprising administering to a patient in need thereof an effective amount of the compound of formula I or a pharmaceutically acceptable salt thereof.
- 14. (Withdrawn) A method for the prophylaxis or treatment of schizophrenia, depression, an anxiety state, dementia, Alzheimer's disease, Lewy bodies dementia, a neurodegenerative disease, Parkinson's disease, Huntington's disease, Tourette's syndrome, a learning or memory impairment, age-related memory impairment, amelioration of withdrawal symptoms in nicotine dependence, stroke or brain damage by a toxic compound, comprising administering to a patient in need thereof an effective amount of a pharmaceutical composition according to claim 11.

15. (Cancelled)

- 16. (Previously Presented) A process for preparing a pharmaceutical composition according to claim 11, comprising converting said composition into a suitable dosage form together with at least one solid, liquid or semi-liquid excipient or adjuvant.
- 17. (Withdrawn) A set or kit comprising separate packs of

 (a) an effective amount of a compound of formula I according to claim 1 or a
 pharmaceutically acceptable salt thereof, and
- (b) an effective amount of a further pharmaceutically active ingredient.
- 18. (Withdrawn) A method for the prophylaxis or treatment of schizophrenia, depression, an anxiety state, dementia, Alzheimer's disease, Lewy bodies dementia, a neurodegenerative disease, Parkinson's disease, Huntington's disease, Tourette's syndrome, a learning or memory impairment, age-related memory impairment, amelioration of withdrawal symptoms in nicotine dependence, stroke or brain damage by a toxic

compound, comprising administering to a patient in need thereof an effective amount of a pharmaceutical composition according to claim 12.

19-20. (Cancelled)

- 21. (Previously Presented) An isolated stereoisomer of a compound of formula I according to claim 1.
- 22. (Previously Presented) A mixture of stereoisomers of a compound of formula I according to claim 1.
 - 23. (Currently Amended) A compound of formula I

$$R^3$$
 N
 $R^{2'}$
 $R^{2''}$
 $R^{2'''}$
 $R^{2'''}$
 $R^{2'''}$

in which

R¹ is H or A,

R², R²", R²" are each, independently of one another, H, A, OH, OCH₃, OCF₃, Hal, CN, COOR¹, CONR¹ or NO₂,

R³ is A, Ar or A-Ar,

R⁴ is H or A,

A is unbranched or branched alkyl having 1-10 carbon atoms, in which one or two CH₂ groups may be replaced by O or S atoms and/or by -CH=CH- groups and/or 1-7 H atoms may be replaced by F,

Ar is phenyl, naphthyl or biphenyl, each of which is unsubstituted or mono-, dior trisubstituted by Hal, A, OR⁴, N(R⁴)₂, NO₂, CN, COOR⁴, CON(R⁴)₂, NR⁴COA, NR⁴CON(R⁴)₂, NR⁴SO₂A, COR⁴, SO₂N(R⁴)₂ or SO₂A,

A-Ar is arylalkyl, where A and Ar have one of the above-mentioned meanings,

Hal is F, Cl, Br or I, and

n is $0, 1, 2, 3, 4, 5, 6, 7, 8, 9 \text{ or } 10_{7}$

or a pharmaceutically acceptable salt or solvate thereof.

- 24. (Cancelled)
- 25. (New) A compound according to claim 1, in which R^{2t} is OH, OCH₃, OCF₃, CN, COOR¹ or CONR¹.